

Flight Scientist Report  
Monday 03/28/2022 ACTIVATE RF146

Flight Type: Statistical Survey Flight  
Flight Route:  
Special Notes:

### **King Air**

Pilot report (Wusk):

Single flight day with HU25. Planned route KLFY ATLIC ZIBUT SKPPR OXANA ECG KLFY. UC12 taxi and takeoff shortly after the HU. Nominal take off and climb out. FL280. Winds at altitude were ~95 kts from the west. 4 sondes dropped ZIBUT, SKPPR, OXANA, Coast. Once over land request direct KLFY from OPHEA for ILS 26. Winds at KLFY were 300@17G26. Crew was Coldsnow, Wusk, Shingler.

Flight scientist report (Harper):

UC12 takeoff: 16:52 utc

Cloud conditions: no cirrus above throughout flight

Sonde 1: 17:30:30utc at ZIBUT

Sonde 2: 17:54:12utc at SKPPR

Sonde 3: 19:15:20utc at OXANA

Sonde 4: near coast

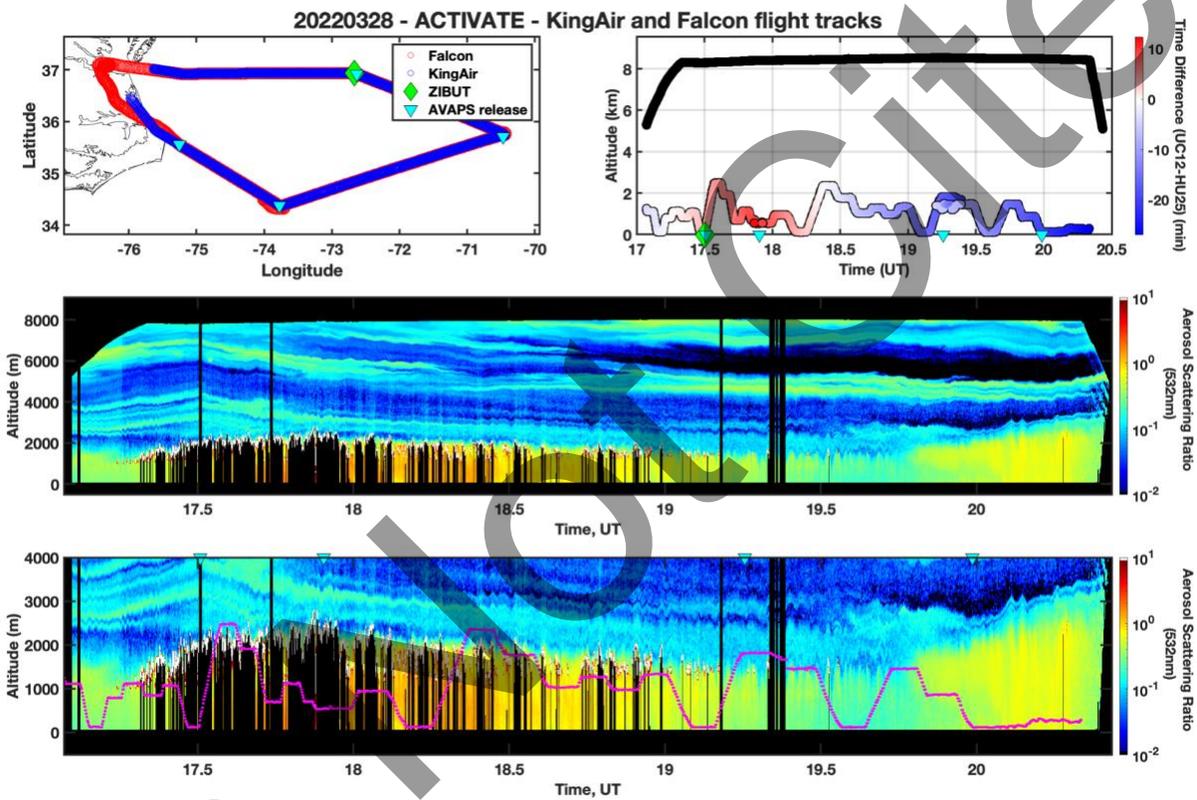
No instrument issues.

### **Falcon**

Pilot report (Slover):

Flight plan adjusted in morning to be KLFY ATLIC ZIBUT SKPPR OXANA ECG KLFY and flown as planned. High winds westerly winds required a 3-min reverse heading orbit just inside OXANA to help UC-12 get to within coincidence again. One low approach at KLFY used for aerosol sampling in the traffic pattern. Good cloudy module statistical sampling from ATLIC to OXANA with clouds as high as 8000' and as low as 3000'. Clear air module flown for most of OXANA - ECG - KLFY.

Flight scientist report ( ):



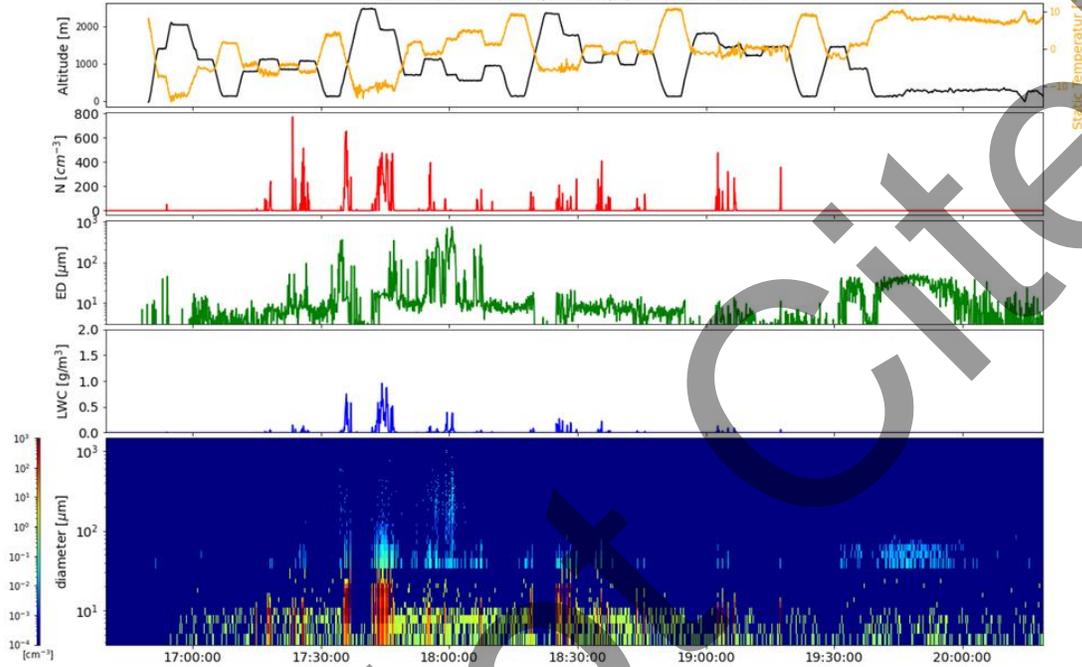
# Quicklook ACTIVATE Cloud Probes (FCDP & 2DS) Quicklook

preliminary data, only for quicklook use

Simon Kirschler, Christiane Voigt, Richard Moore, Ewan Crosbie



Cloud Probes (FCDP & 2DS) Quicklook 28/03/2022 16:39:37-20:18:50



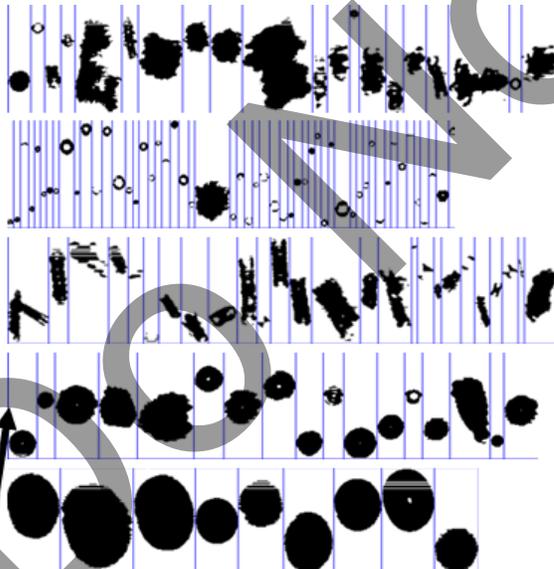
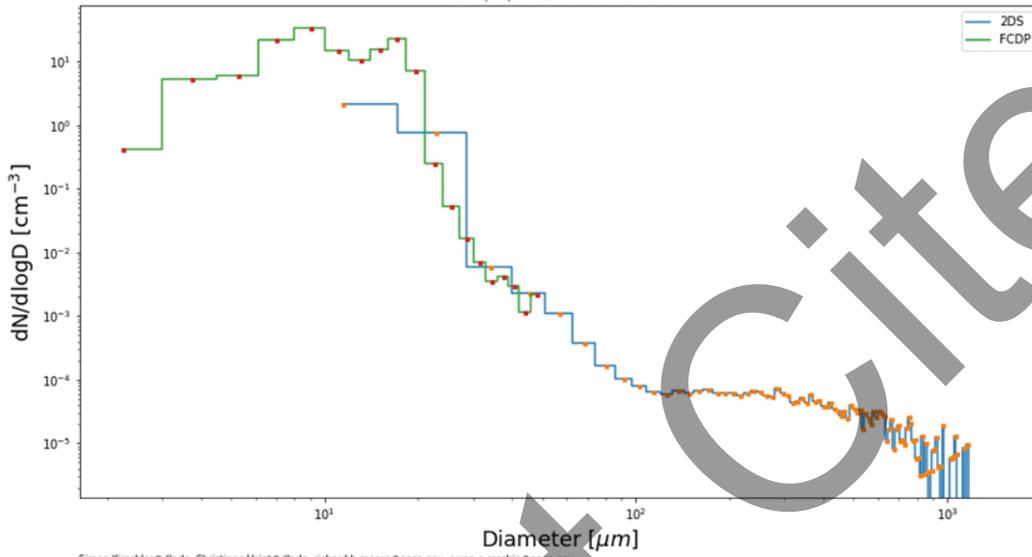
Simon.Kirschler@dlr.de, Christiane.Voigt@dlr.de, richard.h.moore@nasa.gov, ewan.c.crosbie@nasa.gov

# PSD ACTIVATE

preliminary data, only for quicklook use  
Simon Kirschler, Christiane Voigt, Richard Moore, Ewan Crosbie



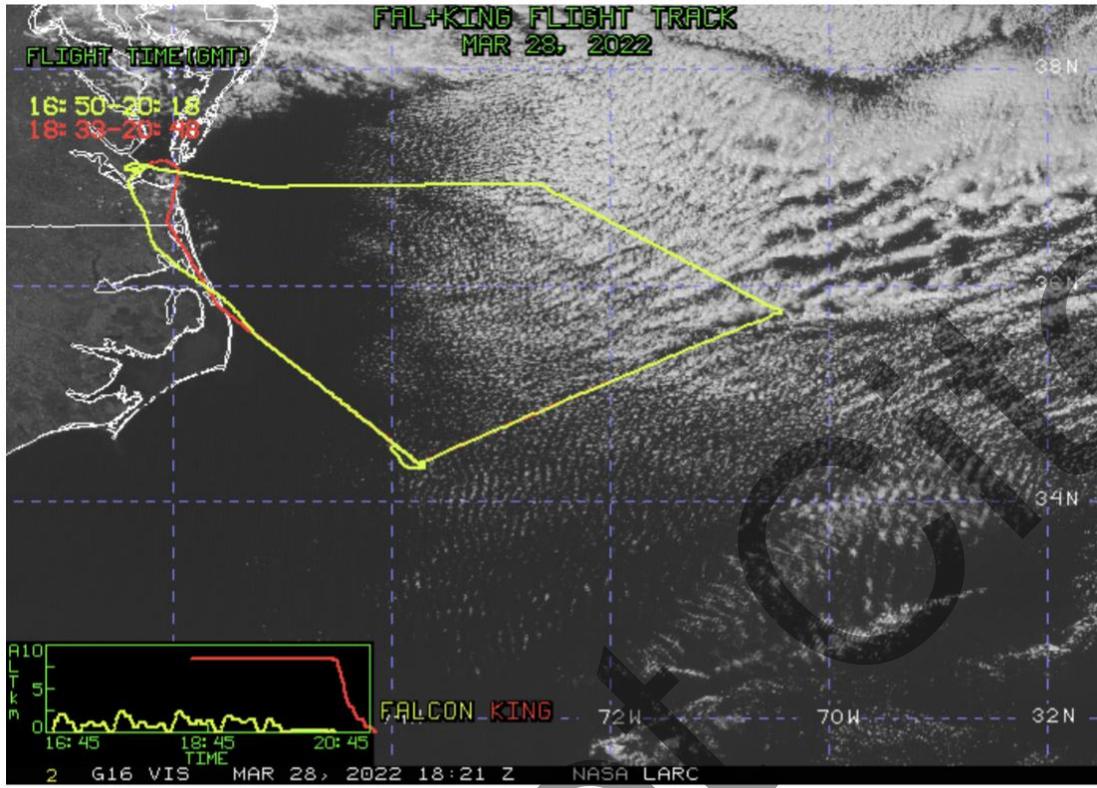
PSD 28/03/2022 16:39:37-20:18:50



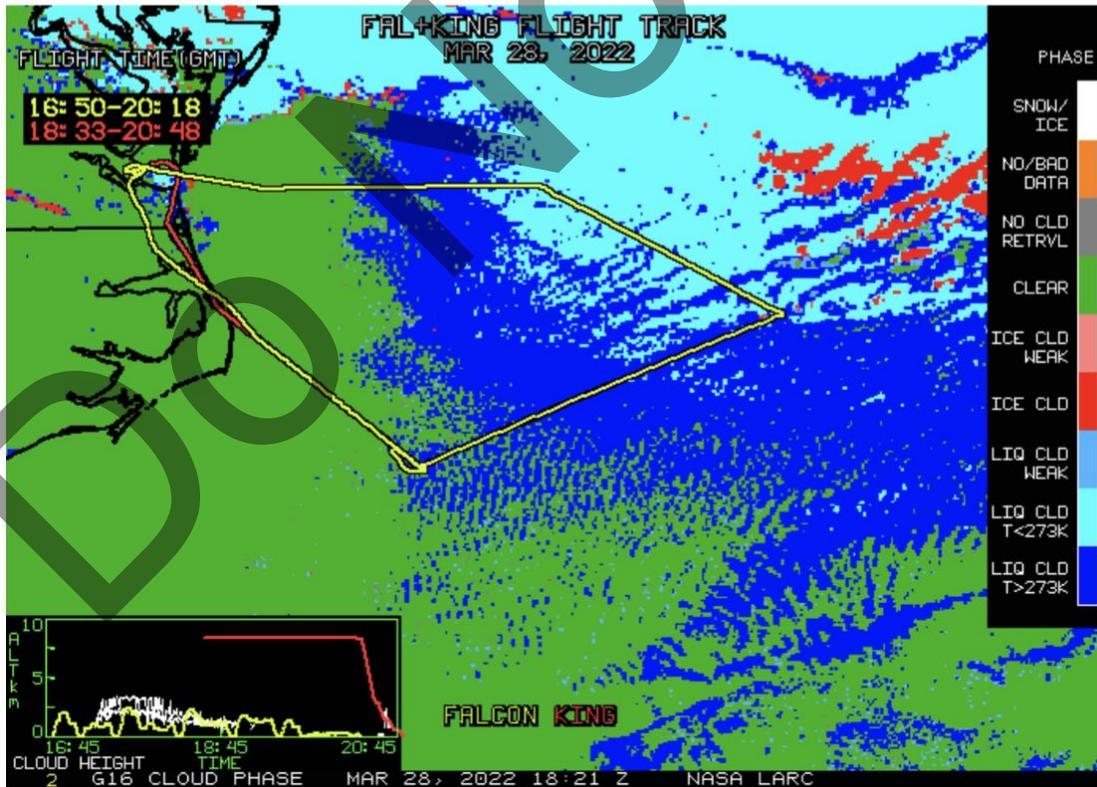
Mixed phase clouds with Precip.

Second of large particles in both aggregate phases

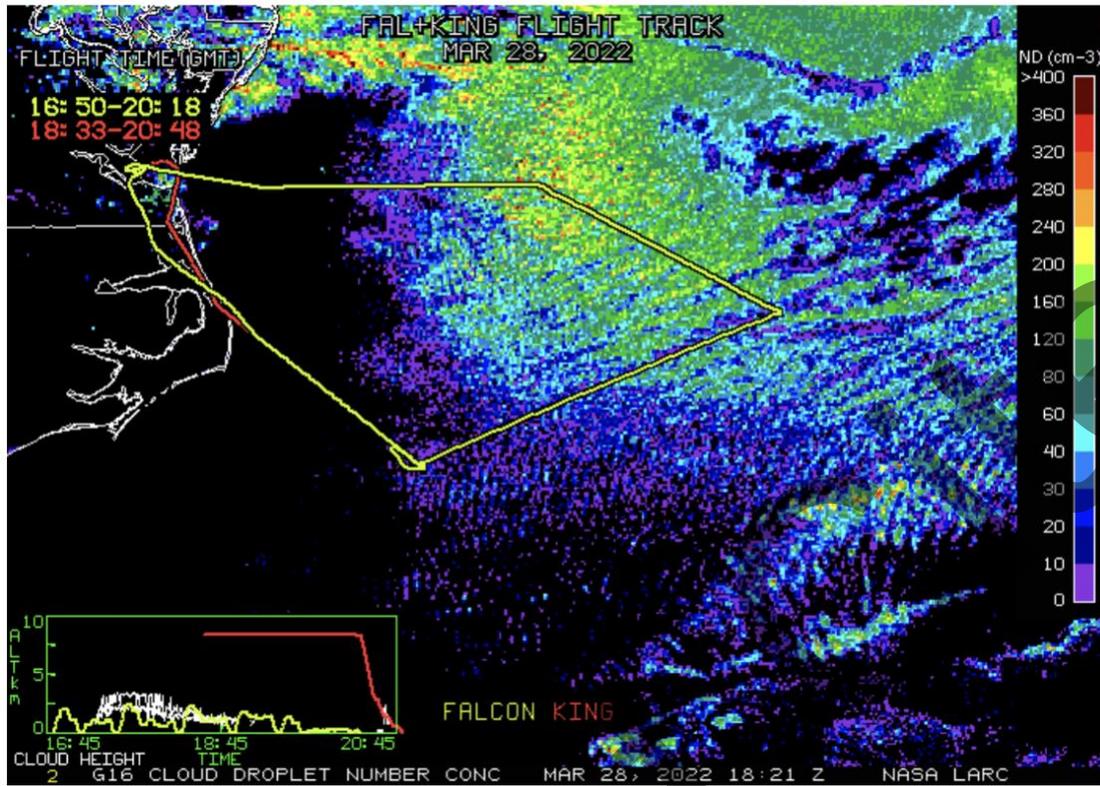
NASA-LaRC Clouds Group GOES-16 Quicklook Images for Flight 146, 18:21 UTC Mar 28, 2022  
Visible Image



Cloud Phase



### Cloud Droplet Number Concentration (cm-3)



### Cloud-Top Height (Kft-ASL)

